

AMENDMENT TO THE CLAIMS:

This listing of claims replace all prior versions and listing of claims in this application.

1. (Currently Amended) A process for reducing the acrylamide content of heat-treated foods compared with corresponding conventional heat-treated foods comprising:
 - (a) selecting genetically modified plant material,
 - (i) wherein said genetically modified plant material has a reduced activity of one or more endogenous R1 proteins in a plant cell compared with a corresponding plant cell of a wild type plant which has not been genetically modified, and
 - (ii) wherein said genetically modified plant material has a reduced content of soluble sugars compared with corresponding conventional plant material ~~which, compared with corresponding conventional plant material, has a reduced content of soluble sugars;~~
 - (b) processing said genetically modified plant material to give a food; and
 - (c) heat treating the food produced in process step b).
2. (Previously presented) The process according to Claim 1, in which said acrylamide content is reduced by at least 15% compared with the acrylamide content of corresponding conventional heat-treated foods.
3. (Previously presented) The process according to Claim 1, in which said acrylamide content is reduced by at least 30% compared with the acrylamide content of corresponding conventional heat-treated foods.
4. (Previously presented) The process according to Claim 1, in which said heat treatment is carried out at temperatures of at least 100°C.
5. (Previously presented) The process according to Claim 1, in which said heat-treated foods include potato chips, French fries, parfried potato chips, mashed potato, biscuits, crackers, crisp bread, breakfast cereals, maize crisps (tacos), popcorn, bread crisps, wafers, salt sticks, coffee, bread, rolls, cakes, rice crisps, pizza and toast, tortillas, croquettes, wedges, potato sticks, twisters, bread coatings for meat, fish and vegetables, bread coatings for nuts, tortilla chips, bread or cereal formulations, or pre-cooked meals.

6. (Canceled)

7. (Canceled)

8. (Currently amended) The process according to Claim [[6]] 1, ~~in which said genetic modification is the introduction of~~ wherein said genetically modified plant material comprises one or more foreign nucleic acid molecules, the presence and/or expression of which leads to the reduction in the activity of one or more endogenous R1 proteins occurring in the plant cell compared with corresponding plant cells of wild type plants which have not been genetically modified.

9. (Previously presented) The process according to Claim 8, in which said foreign nucleic acid molecules include

(a) DNA molecules which code for at least one antisense RNA causing a reduction in expression of endogenous genes which code for R1 proteins;

(b) DNA molecules which, via a cosuppression effect, lead to reduction of the expression of endogenous genes coding for R1 proteins;

(c) DNA molecules which code for at least one ribozyme which cleaves in a specific manner transcripts of endogenous genes coding for R1 proteins;

(d) nucleic acid molecules which are introduced by means of *in vivo* mutagenesis and lead to a mutation or insertion of a heterologous sequence in genes coding for endogenous R1 proteins, the mutation or insertion causing a reduction in the expression of said genes or the synthesis of inactive R1 proteins;

(e) DNA molecules which simultaneously code for at least one antisense RNA and at least one sense RNA, said antisense RNA and said sense RNA forming a double-stranded RNA molecule which causes a reduction in the expression of endogenous genes coding for R1 proteins;

(f) DNA molecules which contain transposons, the integration of the transposon sequences leading to a mutation or an insertion in endogenous genes coding for R1 proteins which causes a reduction in the expression of said genes or the synthesis of inactive R1 proteins; or

(g) T-DNA molecules which, via insertion in endogenous genes coding for R1 protein cause a reduction in the expression of genes coding for R1 protein or the synthesis of inactive R1 proteins.

10. (Previously presented) The process according to Claim 1, in which said plant material originates from potato plants.
11. (Previously presented) The process according to Claim 10, in which said heat-treated foods are potato chips, potato crisps, parfried potato chips or mashed potato.
12. (Currently amended) A method for producing heat-treated foods which, compared with corresponding conventional heat-treated foods, have a reduced acrylamide content comprising
- (a) selecting genetically modified plant material,
 - (i) wherein said genetically modified plant material has a reduced activity of one or more endogenous R1 proteins in a plant cell compared with a corresponding plant cell of a wild type plant which has not been genetically modified, and
 - (ii) wherein said genetically modified plant material has a reduced content of soluble sugars compared with corresponding conventional plant material;
 - (b) processing said genetically modified plant material to give a food; and
 - (c) heat treating the food produced in process step b)
- ~~reducing the acrylamide content of heat-treated foods according to Claim 1.~~
13. (Previously presented) The method according to Claim 12, in which said acrylamide content is reduced by at least 15% compared with the acrylamide content of corresponding conventional heat-treated foods.
14. (Previously presented) The method according to Claim 12, in which said heat-treated foods include potato chips, French fries, parfried potato chips, mashed potato, biscuits, crackers, crisp bread, breakfast cereals, maize crisps (tacos), popcorn, bread crisps, wafers, alts sticks, coffee, bread, rolls, cakes, rice crisps, pizza and toast, tortillas, croquettes, wedges, potato sticks, twisters, bread coatings for meat, fish and vegetables, bread coatings for nuts, tortilla chips, bread or cereal formulations, or pre-cooked meals.
15. (Canceled)